

CD 12
C2

5. (TWICE AMENDED) A graphic editing apparatus, comprising:
a display unit displaying a graphic including a first object and a second object which are connected with each other using a first connector, where the first object, second object, and first connector are all displayed on a display screen; and
an interactive graphical editing unit, when an area on the display screen is designated by a user of said graphic editing apparatus and the designated area overlaps the first connector, the first connector is interactively selected after the first object, second object, and first connector have been displayed, automatically creating and displaying a second connector for connecting the displayed first object and the third object and a third connector for connecting the displayed third object and the second object.

C3
D3

8. (TWICE AMENDED) A graphic editing apparatus, comprising:
a display unit displaying a first object, a plurality of second objects and a plurality of first connectors for connecting the first object and the plurality of second objects, where the first object, the plurality of second objects, and the plurality of first connectors are all displayed on a display screen; and
an interactive graphical editing unit responding to one or more of the plurality of first connectors having been interactively selected after the first object, the plurality of second objects, and the plurality of first connectors have been displayed, by automatically creating and displaying a second connector for connecting the displayed first object and the third object, and one or more third connectors for connecting one or more of the displayed second objects connected to the interactively selected first connector and the third object.

9. (TWICE AMENDED) A graphic editing method, comprising:
displaying a graphic including a first object and a second object which are connected with each other using a first connector, where the first object, second object, and first connector are all displayed on a display screen; and
in response to a third object having been interactively placed in a predetermined position in relation to the first connector after the first object, second object, and first connector have been displayed, automatically creating and displaying a second connector for connecting the displayed first object and the third object and a third connector for connecting the third object and the second object.

D3
C3
concl.

10. (TWICE AMENDED) A graphic editing method:

displaying a graphic including a first object and a second object which are connected with each other using a first connector, where the first object, the second object, and the first connector are all displayed on a display screen; and

after the first object, second object, and first connector have been displayed and when an area on the display screen is designated by a user of said graphic editing apparatus and the designated area overlaps the first connector the first connector is interactively selected, automatically creating and displaying a second connector for connecting the first object and the third object and a third connector for connecting the third object and the second object.

11. (TWICE AMENDED) A storage medium on which a program enabling a computer to execute a process is stored, the process comprising:

displaying a graphic including a first object and a second object which are connected with each other using a first connector, where the first object, the second object, and the first connector are all displayed on a display screen; and

after the first object, second object, and first connector have been displayed and in response to a third object having been interactively placed in a predetermined position in relation to the first connector, creating and displaying a second connector for connecting the displayed first object and the third object and a third connector for connecting the third object and the second object.

12. (TWICE AMENDED) A storage medium on which a program enabling a computer to execute a process is stored, the process comprising:

displaying a graphic including a first object and a second object which are connected with each other using a first connector, where the first object, the second object, and the first connector are all displayed on a display screen; and

after the first object, second object, and first connector have been displayed and when an area on the display screen is designated by a user of said graphic editing apparatus and the designated area overlaps the first connector the first connector is interactively selected, automatically creating and displaying a second connector for connecting the displayed first object and the third object and a third connector for connecting the displayed third object and the second object.

14. (ONCE AMENDED) A graphic editing apparatus, comprising:
 a display unit displaying a first object, a second object, and a first connector, the objects being graphically connected with each other by the first connector; and
 an editing unit, responsive to a displayed third object being interactively located into a predetermined position in relation to the first connector, and in response to the interactive locating, creating for display a second connector graphically connecting the displayed first object and the displayed third object, and creating a third connector graphically connecting the third object and the second object, where the second and third connectors reflect the third object being newly related to the first and second objects.

15. (ONCE AMENDED) A method, comprising:
 interacting with a graphical user interface to insert a node between existing edge-connected nodes of a displayed graph by one of (1) dragging the node over or near a line connecting the existing nodes and (2) dropping the node onto or near the line; and
 responsive to interactively inserting the node, automatically displaying new lines in the graph and automatically undisplaying the line connecting the existing nodes, where the displaying and undisplaying reflects changes to edges of the graph caused by the interactive inserting.

16. (ONCE AMENDED) A method, comprising:
 storing a graph data structure comprising first node data, second node data, and first relationship data logically relating the first node data to the second node data;
 displaying first and second graphical nodes portraying the first node data and the second node data, and displaying a first graphical line portraying the first relationship data by graphically connecting the first and second graphical nodes;
 after said displaying, interactively selecting the first displayed line by one of (1) dragging a new node graphic over or near the first displayed line and (2) dropping the new node graphic onto or near the first displayed line, where the new node graphic has corresponding new node data; and
 in response to said interactive selecting: undisplaying the selected first line, adding to the graph data structure new relationship data that relates the new node data to the first node data and the second node data, displaying a new first line and a new second line portraying the new

relationship data and graphically connecting the new graphical node to the first and second graphical nodes.

17. (ONCE AMENDED) A method, comprising:

storing a graph data structure comprising a set of node variables and information logically interrelating the node variables;

displaying, with a graphical user interface (GUI), graphical nodes and graphical lines graphically connecting the graphical nodes, where the graphical nodes correspond to the node variables, and where the graphical lines correspond to the information logically relating the node variables;

after said displaying and storing, creating a new node variable, where the new node variable is unrelated to any other variables in the set of node variables, and where a third graphical node corresponds to the new node variable;

interacting with the GUI to select a first graphical line from among the displayed graphical lines by one of dragging the third graphical node over or near the first graphical line and dropping the third graphical node onto or near the first graphical line, where the selected first graphical line graphically connects a first and second of the displayed graphical nodes, where a first node variable from the set of node variables corresponds to the displayed first graphical node, where a second node variable from the set of variables corresponds to the displayed second graphical node, and where the displayed first graphical line represents some of the relating information that logically relates the first and second node variable; and

responsive to selecting the first graphical line, altering the logical relating information to logically unrelate the first and second node variables, causing the selected first line to be undisplayed, newly displaying the third graphical node corresponding to the new node variable, logically relating the new variable to first and second variables of the set of variables, newly displaying a first graphical line connecting the newly displayed third graphical node with the first graphical node, and newly displaying a second graphical line connecting the newly displayed third graphical node with the second graphical node.

18. (NEW) A method according to claim 11, wherein the interactive placement

comprises interactively selecting the first connector by one of (1) dragging the new node over or near the first connector and (2) dropping the new node onto or near the first connector.

19. (NEW) A method of inserting interactively and graphically connecting a node to a displayed graph, comprising:

displaying the graph;

dragging a graphic node to change a location of the graphic node; and

in response to automatically determining that the location of the graphic node is in proximity to a connector connected to an existing node in the graph, automatically displaying a new graph connector connecting the graphic node to the existing node.

015
concl.